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NIXON & VANDERHYE
1100 NORTH GLEBE ROAD
8TH FLOOR
ARLINGTON VA 22201-4714

EXAMINER	
MARSCHEL	B

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Please find below a communication from the EXAMINER in charge of this application

Commissioner of Patents

A reference relevant to the examination of this application may soon become available. Ex parte prosecution is SUSPENDED until said reference becomes available.

Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CFR § 1.6(d)). The CM1 Fax Center number is (703) 308-4242.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., whose telephone number is (703) 308-3894. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones, can be reached on (703) 308-1152.

Any inquiry of a general nature or relating to the status of this application should be directed to the Chemical Matrix receptionist whose telephone number is (703) 308-0196.

September 30, 1998

Ardin H. Marschel

ARDIN H. MARSCHEL
PRIMARY EXAMINER

APS
08/939,905
CHK'D, AM
9-30-98

1. 5,792,929, Aug. 11, 1998, Plants with modified flowers; Celestina Mariani, et al., 47/DIG.1; 536/23.2, 23.6, 23.7, 23.71 [IMAGE AVAILABLE]

US PAT NO: 5,792,929 [IMAGE AVAILABLE] L3: 1 of 61

ABSTRACT:
A plant, the nuclear genome of which is transformed with a foreign DNA sequence encoding a product which neutralizes the activity of another product which disrupts the metabolism, functioning and/or development selectively of the plant's flower cells, particularly reproductive organ cells, or seed cells or embryo cells. The foreign DNA sequence also optionally encodes a marker.

2. 5,792,910, Aug. 11, 1998, **Soybean** variety 9294; Leon George Streit, et al., 47/DIG.1; 435/415 [IMAGE AVAILABLE]

US PAT NO: 5,792,910 [IMAGE AVAILABLE] L3: 2 of 61

ABSTRACT:
A **soybean** variety designated 9294, the plants and seeds of **soybean** variety 9294, methods for producing a **soybean** plant produced by crossing the variety 9294 with itself or with another **soybean** plant, and hybrid **soybean** seeds and plants produced by crossing the variety 9294 with another **soybean** line or plant.

3. 5,792,909, Aug. 11, 1998, **Soybean** variety 93B83; Thomas Charles Corbin, 47/DIG.1; 435/415 [IMAGE AVAILABLE]

US PAT NO: 5,792,909 [IMAGE AVAILABLE] L3: 3 of 61

ABSTRACT:
A **soybean** variety designated 93B83, the plants and seeds of **soybean** variety 93B83, methods for producing a **soybean** plant produced by crossing the variety 93B83 with itself or with another **soybean** plant, and hybrid **soybean** seeds and plants produced by crossing the variety 93B83 with another **soybean** line or plant.

4. 5,792,908, Aug. 11, 1998, **Soybean** variety 97b61; John Dudley Hicks, Jr., 47/DIG.1; 435/415 [IMAGE AVAILABLE]

US PAT NO: 5,792,908 [IMAGE AVAILABLE] L3: 4 of 61

ABSTRACT:
A **soybean** variety designated 97B61, the plants and seeds of

soybean variety 97B61, methods for producing a **soybean** plant produced by crossing the variety 97B61 with itself or with another **soybean** plant, and hybrid **soybean** seeds and plants produced by crossing the variety 97B61 with another **soybean** line or plant.

5. 5,792,907, Aug. 11, 1998, **Soybean** variety 9492; Ervin Henry Mueller, et al., 47/DIG.1; 435/415 [IMAGE AVAILABLE]

US PAT NO: 5,792,907 [IMAGE AVAILABLE] L3: 5 of 61

ABSTRACT:
A **soybean** variety designated 9492, the plants and seeds of **soybean** variety 9492, methods for producing a **soybean** plant produced by crossing the variety 9492 with itself or with another **soybean** plant, and hybrid **soybean** seeds and plants produced by crossing the variety 9492 with another **soybean** line or plant.

6. 5,777,198, Jul. 7, 1998, **Soybean** cultivar 91348793300; Roger Lussenden, 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,777,198 [IMAGE AVAILABLE] L3: 6 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 91348793300, is disclosed. The invention relates to the seeds of **soybean** cultivar 91348793300, to the plants of **soybean** 91348793300 and to methods for producing a **soybean** plant produced by crossing the cultivar 91348793300 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 91348793300 with another **soybean** cultivar.

7. 5,767,374, Jun. 16, 1998, Plants with modified flowers seeds or embryos; Willy De Greef, et al., 800/267; 47/DIG.1; 536/23.4, 23.6, 24.1, 24.5; 800/298, 300, 306, 312, 314, 317.3, 322 [IMAGE AVAILABLE]

US PAT NO: 5,767,374 [IMAGE AVAILABLE] L3: 7 of 61

ABSTRACT:
A plant, the nuclear genome of which is transformed with a foreign DNA sequence encoding a product which selectively disrupts the metabolism, functioning and/or development of cells of the flowers, particularly one or more of their female organs, or the seeds or the embryos of the plant. The foreign DNA sequence also optionally encodes a marker.

8. 5,767,353, Jun. 16, 1998, **Soybean** cultivar 91062936407; Kevin W.

Matson, et al., 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,767,353 [IMAGE AVAILABLE] L3: 8 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 91062936407, is disclosed. The invention relates to the seeds of **soybean** cultivar 91062936407, to the plants of **soybean** 91062936407 and to methods for producing a **soybean** plant produced by crossing the cultivar 91062936407 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 91062936407 with another **soybean** cultivar.

9. 5,767,352, Jun. 16, 1998, Soy bean cultivar 9312389470851; William K. Rhodes, 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,767,352 [IMAGE AVAILABLE] L3: 9 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 9312389470851, is disclosed. The invention relates to the seeds of **soybean** cultivar 9312389470851, to the plants of **soybean** 9312389470851 and to methods for producing a **soybean** plant produced by crossing the cultivar 9312389470851 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 9312389470851 with another **soybean** cultivar.

10. 5,767,350, Jun. 16, 1998, **Soybean** cultivar 9380449410; William K. Rhodes, 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,767,350 [IMAGE AVAILABLE] L3: 10 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 9380449410, is disclosed. The invention relates to the seeds of **soybean** cultivar 9380449410, to the plants of **soybean** 9380449410 and to methods for producing a **soybean** plant produced by crossing the cultivar 9380449410 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 9380449410 with another **soybean** cultivar.

11. 5,767,349, Jun. 16, 1998, **Soybean** cultivar 9314579436449; Kevin W. Matson, 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,767,349 [IMAGE AVAILABLE] L3: 11 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 9314579436449, is disclosed. The invention relates to the seeds of **soybean** cultivar 9314579436449, to the plants of **soybean** 9314579436449 and to methods for producing a **soybean** plant produced by crossing the cultivar 9314579436449 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 9314579436449 with another **soybean** cultivar.

12. 5,750,861, May 12, 1998, **Soybean** cultivar 922144460593; Jennifer Hicks, 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,750,861 [IMAGE AVAILABLE] L3: 12 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 922144460593, is disclosed. The invention relates to the seeds of **soybean** cultivar 922144460593, to the plants of **soybean** 922144460593 and to methods for producing a **soybean** plant produced by crossing the cultivar 922144460593 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 922144460593 with another **soybean** cultivar.

13. 5,750,858, May 12, 1998, **Soybean** cultivar 90139820837; William K. Rhodes, 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,750,858 [IMAGE AVAILABLE] L3: 13 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 90139820837, is disclosed. The invention relates to the seeds of **soybean** cultivar 90139820837, to the plants of **soybean** 90139820837 and to methods for producing a **soybean** plant produced by crossing the cultivar 90139820837 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 90139820837 with another **soybean** cultivar.

14. 5,750,857, May 12, 1998, **Soybean** cultivar 9390369478967; William K. Rhodes, 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,750,857 [IMAGE AVAILABLE] L3: 14 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 9390369478967, is disclosed. The

invention relates to the seeds of **soybean** cultivar 9390369478967, to the plants of **soybean** 9390369478967 and to methods for producing a **soybean** plant produced by crossing the cultivar 9390369478967 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 9390369478967 with another **soybean** cultivar.

15. 5,750,856, May 12, 1998, **Soybean** cultivar 9314919423034; Andrew D. Nickell, 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,750,856 [IMAGE AVAILABLE] L3: 15 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 9314919423034, is disclosed. The invention relates to the seeds of **soybean** cultivar 9314919423034, to the plants of **soybean** 9314919423034 and to methods for producing a **soybean** plant produced by crossing the cultivar 9314919423034 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 9314919423034 with another **soybean** cultivar.

16. 5,750,854, May 12, 1998, **Soybean** cultivar 9311779400012; Janet Nykaza, et al., 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,750,854 [IMAGE AVAILABLE] L3: 16 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 9311779400012, is disclosed. The invention relates to the seeds of **soybean** cultivar 9311779400012, to the plants of **soybean** 9311779400012 and to methods for producing a **soybean** plant produced by crossing the cultivar 9311779400012 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 9311779400012 with another **soybean** cultivar.

17. 5,750,853, May 12, 1998, **Soybean** variety 93B41; Peter Armstrong Fuller, et al., 800/260; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,750,853 [IMAGE AVAILABLE] L3: 17 of 61

ABSTRACT:
A **soybean** variety designated 93B41, the plants and seeds of **soybean** variety 93B41, methods for producing a **soybean** plant produced by crossing the variety 93B41 with itself or with another **soybean** plant, and hybrid **soybean** seeds and plants produced by

crossing the variety 93B41 with another **soybean** line or plant.

18. 5,733,741, Mar. 31, 1998, Thermocellulolytic bacteria and their uses; Shigeru Kume, 435/67, 42, 71.2, 170, 209, 220, 252.1, 252.4, 252.7, 262, 264, 277 [IMAGE AVAILABLE]

US PAT NO: 5,733,741 [IMAGE AVAILABLE] L3: 18 of 61

ABSTRACT:
Thermus aquaticus biovar. Nov. SK542 (FERM BP-3382) is an absolute aerobic bacteria. It grows at temperature limit of 40.degree.-82.degree. C. in a normal concentration medium, but its best growth is achieved at 72.degree.-76.degree. C. It produces protein decomposing enzymes functional at a temperature of 75.degree.-85.degree. C. and active in a wide pH range of 4.0-11.3, and a yellow pigment of carotenoid groups. A method for improving the quality of soil comprising applying to the soil a biologically pure culture of an absolute aerobic bacterium Thermus aquaticus biovar. nov. SK542 (FERM BP-3382) having a growth temperature limit of 40.degree.-82.degree. C. in a normal concentration medium, a growth optimum temperature of 72.degree.-76.degree. C., and producing protein decomposing enzymes functional at temperature range of 75.degree.-85.degree. C. and being active in a wide pH range of 4.0-11.3, and a yellow pigment of carotenoid.

19. 5,723,763, Mar. 3, 1998, Plants with modified flowers; Celestina Mariani, et al., 800/306; 47/DIG.1; 435/69.7, 69.8, 199, 320.1, 418, 419; 536/23.4, 23.6, 23.71, 24.1, 24.5; 800/317.3 [IMAGE AVAILABLE]

US PAT NO: 5,723,763 [IMAGE AVAILABLE] L3: 19 of 61

ABSTRACT:
A plant, the nuclear genome of which is transformed with a foreign DNA sequence encoding a product which neutralizes the activity of another product which disrupts the metabolism, functioning and/or development selectively of the plant's flower cells, particularly reproductive organ cells, or seed cells or embryo cells. The foreign DNA sequence also optionally encodes a marker.

20. 5,723,745, Mar. 3, 1998, **Soybean** cultivar 9312229422519; Andrew D. Nickell, 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,723,745 [IMAGE AVAILABLE] L3: 20 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 9312229422519, is disclosed. The

invention relates to the seeds of **soybean** cultivar 9312229422519, to the plants of **soybean** 9312229422519 and to methods for producing a **soybean** plant produced by crossing the cultivar 9312229422519 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 9312229422519 with another **soybean** cultivar.

21. 5,723,744, Mar. 3, 1998, **Soybean** cultivar 9311729435199; Kevin W. Matson, 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,723,744 [IMAGE AVAILABLE] L3: 21 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 9311729435199, is disclosed. The invention relates to the seeds of **soybean** cultivar 9311729435199, to the plants of **soybean** 9311729435199 and to methods for producing a **soybean** plant produced by crossing the cultivar 9311729435199 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 9311729435199 with another **soybean** cultivar.

22. 5,723,743, Mar. 3, 1998, **Soybean** cultivar 9314629501439; Roger Lussenden, 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,723,743 [IMAGE AVAILABLE] L3: 22 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 9314629501439, is disclosed. The invention relates to the seeds of **soybean** cultivar 9314629501439, to the plants of **soybean** 9314629501439 and to methods for producing a **soybean** plant produced by crossing the cultivar 9314629501439 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 9314629501439 with another **soybean** cultivar.

23. 5,723,741, Mar. 3, 1998, **Soybean** cultivar 89150793; Kevin W. Matson, et al., 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,723,741 [IMAGE AVAILABLE] L3: 23 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 89150793, is disclosed. The invention relates to the seeds of **soybean** cultivar 89150793, to the plants of **soybean** 89150793 and to methods for producing a **soybean** plant produced by crossing the cultivar 89150793 with itself or another

soybean variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 89150793 with another **soybean** cultivar.

24. 5,723,735, Mar. 3, 1998, **Soybean** cultivar 913148931250; Kevin W. Matson, 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,723,735 [IMAGE AVAILABLE] L3: 24 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 913148931250, is disclosed. The invention relates to the seeds of **soybean** cultivar 913148931250, to the plants of **soybean** 913148931250 and to methods for producing a **soybean** plant produced by crossing the cultivar 913148931250 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 913148931250 with another **soybean** cultivar.

25. 5,723,734, Mar. 3, 1998, **Soybean** cultivar 92382094203; William K. Rhodes, 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,723,734 [IMAGE AVAILABLE] L3: 25 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 92382094203, is disclosed. The invention relates to the seeds of **soybean** cultivar 92382094203, to the plants of **soybean** 92382094203 and to methods for producing a **soybean** plant produced by crossing the cultivar 92382094203 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 92382094203 with another **soybean** cultivar.

26. 5,723,732, Mar. 3, 1998, **Soybean** cultivar 9063092096; Roger Lussenden, 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,723,732 [IMAGE AVAILABLE] L3: 26 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 9063092096, is disclosed. The invention relates to the seeds of **soybean** cultivar 9063092096, to the plants of **soybean** 9063092096 and to methods for producing a **soybean** plant produced by crossing the cultivar 9063092096 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 9063092096 with another **soybean** cultivar.

27. 5,710,368, Jan. 20, 1998, **Soybean** cultivar 924181339; William K. Rhodes, 800/312; 47/DIG.1; 435/415; 800/271 [IMAGE AVAILABLE]

US PAT NO: 5,710,368 [IMAGE AVAILABLE] L3: 27 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 924181339, is disclosed. The invention relates to the seeds of **soybean** cultivar 924181339, to the plants of **soybean** 924181339 and to methods for producing a **soybean** plant produced by crossing the cultivar 924181339 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 924181339 with another **soybean** cultivar.

28. 5,689,041, Nov. 18, 1997, Plants modified with barstar for fertility restoration; Celestina Mariani, et al., 800/266; 435/320.1; 800/298, 300, 301, 302, 305, 306, 312, 317.3, 320.2, 320.3, 322, 323.2 [IMAGE AVAILABLE]

US PAT NO: 5,689,041 [IMAGE AVAILABLE] L3: 28 of 61

ABSTRACT:
A plant, the nuclear genome of which is transformed with a first foreign DNA sequence. The first foreign DNA sequence comprises a fertility-restorer DNA which encodes a first RNA, a protein or polypeptide that can inactivate a second RNA, protein or polypeptide in cells of the plant. The second RNA, protein or polypeptide is encoded by a sterility DNA in a second foreign DNA sequence in the plant's nuclear genome. Expression of the sterility DNA, in the absence of expression of the fertility-restorer DNA, would disturb significantly the metabolism, functioning and/or development of cells of the plant's flowers, particularly, the plant's reproductive organs, or cells of the plant's seeds or embryos in which the sterility DNA is selectively expressed, thereby rendering the plant male- or female-sterile. The first and second foreign DNA sequences also can encode suitable markers.

29. 5,689,037, Nov. 18, 1997, **Soybean** cultivar 902437929045; Craig K. Moots, 800/271; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,689,037 [IMAGE AVAILABLE] L3: 29 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 902437929045, is disclosed. The invention relates to the seeds of **soybean** cultivar 902437929045, to

the plants of **soybean** 902437929045 and to methods for producing a **soybean** plant produced by crossing the cultivar 902437929045 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 902437929045 with another **soybean** cultivar.

30. 5,684,235, Nov. 4, 1997, **Soybean** cultivar 91339893433; Roger Lussenden, 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,684,235 [IMAGE AVAILABLE] L3: 30 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 91339893433, is disclosed. The invention relates to the seeds of **soybean** cultivar 91339893433, to the plants of **soybean** 91339893433 and to methods for producing a **soybean** plant produced by crossing the cultivar 91339893433 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 91339893433 with another **soybean** cultivar.

31. 5,684,233, Nov. 4, 1997, **Soybean** cultivar 91348793299; Roger Lussenden, 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,684,233 [IMAGE AVAILABLE] L3: 31 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 91348793299, is disclosed. The invention relates to the seeds of **soybean** cultivar 91348793299, to the plants of **soybean** 91348793299 and to methods for producing a **soybean** plant produced by crossing the cultivar 91348793299 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 91348793299 with another **soybean** cultivar.

32. 5,684,229, Nov. 4, 1997, **Soybean** cultivar 91112039947; Christopher Tinius, 800/312; 47/DIG.1; 800/271 [IMAGE AVAILABLE]

US PAT NO: 5,684,229 [IMAGE AVAILABLE] L3: 32 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 91112039947, is disclosed. The invention relates to the seeds of **soybean** cultivar 91112039947, to the plants of **soybean** 91112039947 and to methods for producing a **soybean** plant produced by crossing the cultivar 91112039947 with itself or another **soybean** variety. The invention further relates to

hybrid **soybean** seeds and plants produced by crossing the cultivar 91112039947 with another **soybean** cultivar.

33. 5,675,067, Oct. 7, 1997, **Soybean** cultivar 9106132516; E. Hamer Paschal, II, 800/312; 47/DIG.1; 435/415 [IMAGE AVAILABLE]

US PAT NO: 5,675,067 [IMAGE AVAILABLE] L3: 33 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 9106132516, is disclosed. The invention relates to the seeds of **soybean** cultivar 9106132516, to the plants of **soybean** 9106132516 and to methods for producing a **soybean** plant produced by crossing the cultivar 9106132516 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 9106132516 with another **soybean** cultivar.

34. 5,659,119, Aug. 19, 1997, **Soybean** cultivar 9270518003; Craig K. Moots, 800/312; 47/DIG.1; 435/415 [IMAGE AVAILABLE]

US PAT NO: 5,659,119 [IMAGE AVAILABLE] L3: 34 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 9270518003, is disclosed. The invention relates to the seeds of **soybean** cultivar 9270518003, to the plants of **soybean** 9270518003 and to methods for producing a **soybean** plant produced by crossing the cultivar 9270518003 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 9270518003 with another **soybean** cultivar.

35. 5,659,118, Aug. 19, 1997, **Soybean** cultivar 9241565976; Kevin W. Matson, 800/312; 47/DIG.1; 435/415 [IMAGE AVAILABLE]

US PAT NO: 5,659,118 [IMAGE AVAILABLE] L3: 35 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 9241565976, is disclosed. The invention relates to the seeds of **soybean** cultivar 9241565976, to the plants of **soybean** 9241565976 and to methods for producing a **soybean** plant produced by crossing the cultivar 9241565976 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 9241565976 with another **soybean** cultivar.

36. 5,659,117, Aug. 19, 1997, **Soybean** cultivar 924156915; William K. Rhodes, 800/312; 47/DIG.1; 435/415 [IMAGE AVAILABLE]

US PAT NO: 5,659,117 [IMAGE AVAILABLE] L3: 36 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 924156915, is disclosed. The invention relates to the seeds of **soybean** cultivar 924156915, to the plants of **soybean** 924156915 and to methods for producing a **soybean** plant produced by crossing the cultivar 924156915 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 924156915 with another **soybean** cultivar.

37. 5,659,116, Aug. 19, 1997, **Soybean** cultivator 927113675; William K. Rhodes, 800/312; 47/DIG.1; 435/415 [IMAGE AVAILABLE]

US PAT NO: 5,659,116 [IMAGE AVAILABLE] L3: 37 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 927113675, is disclosed. The invention relates to the seeds of **soybean** cultivar 927113675, to the plants of **soybean** 927113675 and to methods for producing a **soybean** plant produced by crossing the cultivar 927113675 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 927113675 with another **soybean** cultivar.

38. 5,659,113, Aug. 19, 1997, **Soybean** cultivar A5547; William K. Rhodes, 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,659,113 [IMAGE AVAILABLE] L3: 38 of 61

ABSTRACT:
A novel **soybean** cultivar, designated A5547, is disclosed. The invention relates to the seeds of **soybean** cultivar A5547, to the plants of **soybean** A5547 and to methods for producing a **soybean** plant produced by crossing the cultivar A5547 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar A5547 with another **soybean** cultivar.

39. 5,659,111, Aug. 19, 1997, **Soybean** cultivar A5545; William K. Rhodes, 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,659,111 [IMAGE AVAILABLE] L3: 39 of 61

ABSTRACT:
A novel **soybean** cultivar, designated A5545, is disclosed. The invention relates to the seeds of **soybean** cultivar A5545, to the plants of **soybean** A5545 and to methods for producing a **soybean** plant produced by crossing the cultivar A5545 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar A5545 with another **soybean** cultivar.

40. 5,652,354, Jul. 29, 1997, Stamen-selective promoters; Celestina Mariani, et al., 536/24.1; 435/320.1; 536/23.6 [IMAGE AVAILABLE]

US PAT NO: 5,652,354 [IMAGE AVAILABLE] L3: 40 of 61

ABSTRACT:
Promoters from endogenous genes of plants are isolated, wherein said promoters direct gene expression selectively in stamen cells of said plant, particularly in tapetum cells of said plant. The promoters may be used to transform a plant with a foreign DNA sequence encoding a product which selectively disrupts the metabolism, functioning, and/or development of stamen cells of the plant.

41. 5,650,552, Jul. 22, 1997, **Soybean** cultivar 93127627010; Kevin W. Matson, 800/312; 47/DIG.1; 435/415 [IMAGE AVAILABLE]

US PAT NO: 5,650,552 [IMAGE AVAILABLE] L3: 41 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 93127627010, is disclosed. The invention relates to the seeds of **soybean** cultivar 93127627010, to the plants of **soybean** 93127627010 and to methods for producing a **soybean** plant produced by crossing the cultivar 93127627010 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 93127627010 with another **soybean** cultivar.

42. 5,648,596, Jul. 15, 1997, **Soybean** cultivar 8967515073; Christopher Tinius, 800/312; 47/DIG.1; 435/415 [IMAGE AVAILABLE]

US PAT NO: 5,648,596 [IMAGE AVAILABLE] L3: 42 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 8967515073, is disclosed. The

invention relates to the seeds of **soybean** cultivar 8967515073, to the plants of **soybean** 8967515073 and to methods for producing a **soybean** plant produced by crossing the cultivar 8967515073 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 8967515073 with another **soybean** cultivar.

43. 5,648,595, Jul. 15, 1997, **Soybean** cultivar 89150792; Kevin W. Matson, et al., 800/312; 47/DIG.1; 435/415 [IMAGE AVAILABLE]

US PAT NO: 5,648,595 [IMAGE AVAILABLE] L3: 43 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 89150792, is disclosed. The invention relates to the seeds of **soybean** cultivar 89150792, to the plants of **soybean** 89150792 and to methods for producing a **soybean** plant produced by crossing the cultivar 89150792 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 89150792 with another **soybean** cultivar.

44 5,648,264, Jul. 15, 1997, Thermocellulolytic bacteria and their uses; Shigeru Kume, 435/264; 71/9, DIG.2; 422/5; 424/93.41; 435/42, 209, 220, 252.1, 252.4, 252.7, 277, 842; 504/117 [IMAGE AVAILABLE]

US PAT NO: 5,648,264 [IMAGE AVAILABLE] L3: 44 of 61

ABSTRACT:

Clostridium thermocellum biovar. nov. SK522 (FERM BP-345 g) is a thermophilic cellulose decomposing bacteria, capable of solubilizing lignin and fermenting cellulose excellently. Although its temperature limit for growth is 40.degree.-80.degree. C., it grows best at 65.degree.-72.degree. C.
Thermus aquaticus biovar. nov. SK542 (FERM BP-3382) is an absolute aerobic bacteria. It grows at temperature limit of 40.degree.-82.degree. C. in a normal concentration medium, but its best growth is achieved at 72.degree.-76.degree. C. It produces protein decomposing enzymes functional at a temperature of 75.degree.-85.degree. C. and active in a wide pH range of 4.0-11.3, and a yellow pigment of carotenoid groups. Both strains can be mix-cultured. Depending on various purposes, as the mix culture is able to decompose organic materials containing cellulose and/or lignin, it can be used for soil improvement.

45. 5,639,945, Jun. 17, 1997, **Soybean** cultivar 8816075696;

Christopher Tinius, et al., 800/312; 47/DIG.1; 435/415 [IMAGE AVAILABLE]

US PAT NO: 5,639,945 [IMAGE AVAILABLE] L3: 45 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 8816075696, is disclosed. The invention relates to the seeds of **soybean** cultivar 8816075696, to the plants of **soybean** 8816075696 and to methods for producing a **soybean** plant produced by crossing the cultivar 8816075696 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 8816075696 with another **soybean** cultivar.

46. 5,639,944, Jun. 17, 1997, **Soybean** cultivar 91119238595; Christopher Tinius, 800/312; 47/DIG.1; 435/415 [IMAGE AVAILABLE]

US PAT NO: 5,639,944 [IMAGE AVAILABLE] L3: 46 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 91119238595, is disclosed. The invention relates to the seeds of **soybean** cultivar 91119238595, to the plants of **soybean** 91119238595 and to methods for producing a **soybean** plant produced by crossing the cultivar 91119238595 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 91119238595 with another **soybean** cultivar.

47. 5,633,441, May 27, 1997, Plants with genetic female sterility; Willy De Greef, et al., 800/271; 435/320.1, 418, 419; 536/24.1; 800/287, 317.3 [IMAGE AVAILABLE]

US PAT NO: 5,633,441 [IMAGE AVAILABLE] L3: 47 of 61

ABSTRACT:
The invention concerns female-sterile plants that comprise a foreign DNA incorporated in the nuclear genome of their cells. This foreign DNA first comprises a female-sterility DNA encoding a protein or polypeptide such as barnase which, when produced in the cells of the plant, kills or significantly disturbs the metabolism, functioning or development of the cells. The foreign DNA also comprises a first promoter which directs expression of the female-sterility DNA selectively in style cells, stigma cells or style-and stigma cells of the female reproductive organs of the plants. The first promoter does not direct detectable expression of the female sterility DNA in the ovule or in other parts of the plant so that the plant remains male-fertile. The female-sterility DNA is in the same

transcriptional unit as and under the control of the first promoter.

48. 5,633,436, May 27, 1997, Feedcrops enriched in sulfur amino acids and methods for improvements; Christine I. Wandelt, 800/267; 435/69.1, 320.1, 415, 419; 536/23.6, 24.1; 800/293, 306 [IMAGE AVAILABLE]

US PAT NO: 5,633,436 [IMAGE AVAILABLE] L3: 48 of 61

ABSTRACT:
There is provided a chimeric gene and a method to increase the seed methionine content in plants. The chimeric gene is capable of transforming plants, particularly rapeseed and **soybean**, to overexpress a methionine-rich maize seed storage protein in seeds. There is also provided the plants and seeds containing the chimeric gene.

49. 5,633,431, May 27, 1997, **Soybean** cultivar 9142105423; Kevin W. Matson, et al., 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,633,431 [IMAGE AVAILABLE] L3: 49 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 9142105423, is disclosed. The invention relates to the seeds of **soybean** cultivar 9142105423, to the plants of **soybean** 9142105423 and to methods for producing a **soybean** plant produced by crossing the cultivar 9142105423 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 9142105423 with another **soybean** cultivar.

50. 5,633,430, May 27, 1997, **Soybean** cultivar A3134; E. Hamer Paschal, II, 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,633,430 [IMAGE AVAILABLE] L3: 50 of 61

ABSTRACT:
A novel **soybean** cultivar, designated A3134, is disclosed. The invention relates to the seeds of **soybean** cultivar A3134, to the plants of **soybean** A3134 and to methods for producing a **soybean** plant produced by crossing the cultivar A3134 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar A3134 with another **soybean** cultivar.

51. 5,625,134, Apr. 29, 1997, **Soybean** cultivar 9246337447; Christopher Tinius, et al., 800/271; 47/DIG.1; 435/415, 800/312 [IMAGE

AVAILABLE]

US PAT NO: 5,625,134 [IMAGE AVAILABLE] L3: 51 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 9246337447, is disclosed. The invention relates to the seeds of **soybean** cultivar 9246337447, to the plants of **soybean** 9246337447 and to methods for producing a **soybean** plant produced by crossing the cultivar 9246337447 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar 9246337447 with another **soybean** cultivar.

52. 5,608,148, Mar. 4, 1997, Transgenic cotton plants producing heterologous **peroxidase**; Maliyakal E. John, 800/314; 435/419 [IMAGE AVAILABLE]

US PAT NO: 5,608,148 [IMAGE AVAILABLE] L3: 52 of 61

ABSTRACT:
A fiber-producing plant comprising in its genome a heterologous genetic construct is disclosed. This genetic construct comprises a fiber-specific promoter and a coding sequence encoding a plant **peroxidase**. Preferably, the coding sequence is for cotton **peroxidase**. Seeds of the plant containing this genetic construct and plant cells containing this construct are also disclosed.

53. 5,608,141, Mar. 4, 1997, **Soybean** cultivar A3834; E. Hamer Paschal, II, 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,608,141 [IMAGE AVAILABLE] L3: 53 of 61

ABSTRACT:
A novel **soybean** cultivar, designated A3834, is disclosed. The invention relates to the seeds of **soybean** cultivar A3834, to the plants of **soybean** A3834 and to methods for producing a **soybean** plant produced by crossing the cultivar A3834 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar A3834 with another **soybean** cultivar.

54. 5,602,320, Feb. 11, 1997, **Soybean** cultivar A4922; William K. Rhodes, 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,602,320 [IMAGE AVAILABLE] L3: 54 of 61

ABSTRACT:
A novel **soybean** cultivar, designated A4922, is disclosed. The invention relates to the seeds of **soybean** cultivar A4922, to the plants of **soybean** A4922 and to methods for producing a **soybean** plant produced by crossing the cultivar A4922 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar A4922 with another **soybean** cultivar.

55. 5,602,319, Feb. 11, 1997, **Soybean** cultivar 9243035090; William K. Rhodes, et al., 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,602,319 [IMAGE AVAILABLE] L3: 55 of 61

ABSTRACT:
A novel **soybean** cultivar, designated 9243035090, is disclosed. The invention relates to the seeds of **soybean** cultivar 9243035090, to the plants of **soybean** 9243035090 and to methods for producing a **soybean** plant produced by crossing the cultivar 9243035090 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plains produced by crossing the cultivar 9243035090 with another **soybean** cultivar.

56. 5,576,477, Nov. 19, 1996, **Soybean** cultivar A2704; Kevin W. Matson, et al., 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,576,477 [IMAGE AVAILABLE] L3: 56 of 61

ABSTRACT:
A novel **soybean** cultivar, designated A2704, is disclosed. The invention relates to the seeds of **soybean** cultivar A2704, to the plants of **soybean** A2704 and to methods for producing a **soybean** plant produced by crossing the cultivar A2704 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar A2704 with another **soybean** cultivar.

57. 5,576,476, Nov. 19, 1996, **Soybean** cultivar A3732; Craig K. Moots, 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,576,476 [IMAGE AVAILABLE] L3: 57 of 61

ABSTRACT:
A novel **soybean** cultivar, designated A3732, is disclosed. The

invention relates to the seeds of **soybean** cultivar A3732, to the plants of **soybean** A3732 and to methods for producing a **soybean** plant produced by crossing the cultivar A3732 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar A3732 with another **soybean** cultivar.

58. 5,576,474, Nov. 19, 1996, **Soybean** cultivar A1923; Roger Lussenden, 800/271; 47/DIG.1; 435/415; 800/312 [IMAGE AVAILABLE]

US PAT NO: 5,576,474 [IMAGE AVAILABLE] L3: 58 of 61

ABSTRACT:
A novel **soybean** cultivar, designated A1923, is disclosed. The invention relates to the seeds of **soybean** cultivar A1923, to the plants of **soybean** A1923 and to methods for producing a **soybean** plant produced by crossing the cultivar A1923 with itself or another **soybean** variety. The invention further relates to hybrid **soybean** seeds and plants produced by crossing the cultivar A1923 with another **soybean** cultivar.

59. 5,569,597, Oct. 29, 1996, Methods of inserting viral DNA into plant material; Nigel H. Grimsley, et al., 800/279; 435/320.1; 800/280, 294 [IMAGE AVAILABLE]

US PAT NO: 5,569,597 [IMAGE AVAILABLE] L3: 59 of 61

ABSTRACT:
The present invention relates to a novel method of inserting viral DNA, which optionally may contain cargo-DNA, into plants or viable parts thereof, but preferably into plants of the monocotyledon class, and most preferably into plants of the family Gramineae, using suitable transfer microorganisms. Further comprised by the invention are recombinant DNA, plasmid and vector molecules suitably adapted to the specific conditions of the process according to the invention and the transgenic plant products obtainable in accordance with the said process.

60. 5,530,183, Jun. 25, 1996, **Soybean** variety 9253; Walter R. Fehr, et al., 800/312; 435/415 [IMAGE AVAILABLE]

US PAT NO: 5,530,183 [IMAGE AVAILABLE] L3: 60 of 61

ABSTRACT:
Soybean variety 9253 is a high-performance **soybean** variety which also provides a low linolenic acid specialty **soybean** oil.

61. 5,516,980, May 14, 1996, **Soybean** variety XB37ZA; Walter R. Fehr, et al., 800/312; 435/415 [IMAGE AVAILABLE]

US PAT NO: 5,516,980 [IMAGE AVAILABLE] L3: 61 of 61

ABSTRACT:
Soybean variety XB37ZA is a high-performance **soybean** variety which also provides a low palmitic, low-saturate specialty **soybean** oil.

(FILE 'USPAT' ENTERED AT 18:11:39 ON 30 SEP 1998)
L1 0 S SEED(W)COAT AND COAT(W)PEROXIDASE?
L2 69 S SEED(W)COAT AND PEROXIDASE?
L3 61 S SOYBEAN AND L2